

22. FURTHER COLLECTION OF THE SYRPHIDAE (DIPTERA) FROM CENTRAL INDIA

R. S. Gokulpure's note under the above heading in this *Journal*, Vol. 68(3):848 states that the Syrphidae play an important part in checking aphids. This remark, without qualification, may give rise to misunderstanding as many Syrphids do not feed on aphids in the larval stages.

I quote from Imm's TEXTBOOK OF ENTOMOLOGY as under:— The larval habits of Syrphidae are extremely varied. They may be:— (a) *Phytophagous*, feeding externally upon plants (*Mesogramma polita*) or internally in bulbs (*Merodon equestris*, *Eumerus strigatus*) or within stems or in fungi (*Chilosia*). (b) *Carnivorous*, living predaceously upon aphids and the nymphs of other Homoptera (species of *Pipiza*, *Paragus*, *Melanostoma*, *Baccha*, *Syrphus*, etc.). (c) *Saprophagous*, living in decaying organic material, dung, liquid mud or dirty water (species of *Eristalis*, *Helophilus*, *Platychirus*, *Sericomyia*, *Syritta*, *Tropidia*, etc.): in the sap and wet rotting wood of diseased parts of trees (*Xylota*, *Mallota*, *Myriatropa*, *Myiolepta*, *Ceria*, etc.): or as scavengers in the nests of ants and termites (*Microdon*) or of Aculeate Hymenoptera (*Volucella*).

From the above it will be seen that not all Syrphids are the gardener's friends.

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23. ON A NEW SUBSPECIES OF *AETHUS LATICOLLIS* WAGNER (HEMIPTERA : HETEROPTERA : CYDNIDAE) AS A SERIOUS PEST OF *PENNISETUM TYPHOIDES* (BURM.) IN INDIA

(With two text-figures)

A small collection of burrower bugs of the genus *Aethus* have been submitted for identification by Dr. Gurdev Singh Sandhu, Entomologist (Maize), Punjab Agricultural University, Ludhiana, India, with a short note reporting their appearance as serious pest of *Pennisetum typhoides* (Burm.), commonly known as *Bajra* or *Bajri*, a millet crop traditionally cultivated as *Barani* crop in semi-arid areas around Delhi, Rajasthan, Haryana and South East Punjab. Dr. Sandhu also informs that this new pest is now shifting to Wheat in sandy areas of Punjab.

Examination of the specimens revealed that they belong to a new

subspecies of *Aethus laticollis* Wagner (1954, pp. 1-3). Hitherto, this species has been known from Canary Is., Southern Europe, North Africa and adjoining areas, more or less between latitude 30-35 North. The present finding of a new subspecies between the same latitudes but a little eastward is not surprising. As far as it is known *Aethus laticollis* or its allies have never been reported as pest of economic crops from any area of their distribution, prior to Dr. Sandhu's report. The appearance of the new subspecies as a serious pest is therefore unusual. The reason for a sudden increase in its population could be attributed to the ecological changes being brought about as a result of artificial irrigation in and around traditionally semi-arid districts of Ludhiana, Ferozepur etc. A parallel case occurred in the districts of Lower Baluchistan and Upper Sind, Pakistan, in the early thirties of this century (Ahmad & Ghauri 1953).

There the scanty annual rainfall maintained a limited, nevertheless a fluctuating population in direct proportion to the amount of moisture available, of two species of Gryllids, *Acheta domestica* (Linnaeus) and *Acheta hispanica* (Rambur). With the advent of canal irrigation, vast areas began to receive regular moisture. The new irrigation facilities were planned to be utilised for extensive cotton growing by the then British Cotton Growing Association, in India. The supply of moisture coupled with the cotton seeds and seedlings serving the crickets as food gave such a boost to their population that within a short period their small and scattered pockets rose steeply in numbers and assumed out-break proportions. The damage inflicted to the newly introduced Cotton crop was so serious that after a few futile attempts to control the pests, the B.C.G.A. had to abandon their project in these areas.

Aethus Dallas

Dallas, 1851, pp. 110 & 112. Type species, *Cydnius indicus* Westwood, 1837, p. 19.

***Aethus laticollis* Wagner subspecies *orientalis* ssp. n.**

Colour.

Dark brown to chestnut brown, more or less similar to that of nominate species.

Size.

Total length of body 3.75-4.00 mm, maximum width at about middle of body 2.50-2.75 mm.

Structure.

Ocelli prominent, space between them slightly more than $1\frac{1}{2}$ times width of an eye (4.00 : 2.85); width of vertex between eyes $2\frac{1}{4}$ times width of an eye (6.45 : 2.85), total width of head across eyes 4 times width of an eye (11.33 : 2.85); eyes prominent. Paramere (clasper)

with subapical lobe very prominent, apex slightly conical, setose margin appreciably concave, marginal denticulation very clear, dorsoventral setae extending upto middle of paramere; aedeagus and theca similar to that of *Aethus l. laticollis* Wagner.

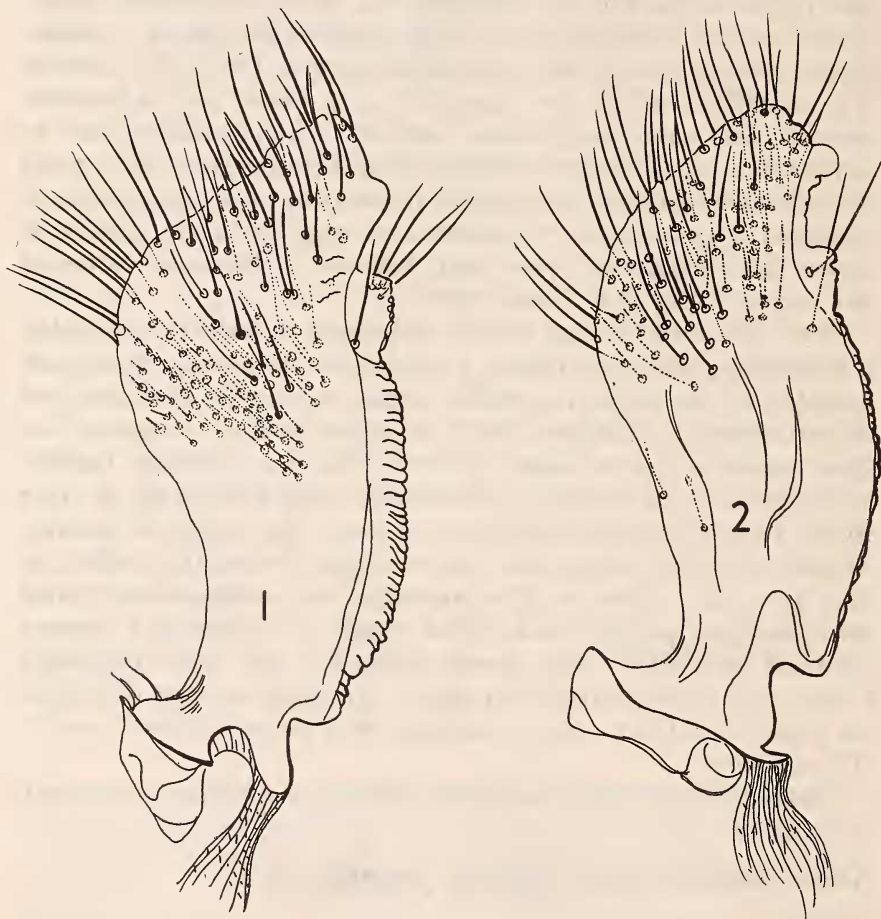


Fig. 1. Left paramere of *Aethus laticollis* ssp. n. Fig. 2. Left paramere of *Aethus l. laticollis* Wagner, based on the ♂ paratype in the British Museum (Natural History), London.

Comments.

The new subspecies differs from its nominate form mainly in its prominent ocelli and eyes, narrower vertex and the apex, the subapical lobe and more numerous setae of paramere (compare fig. 1 and 2).

HOLOTYPE ♂, Ludhiana, ix. 1971 (Punjab Agricultural University, Ludhiana); paratypes 2 ♂♂ and 1 ♀, same data as holotype; deposited in the British Museum (Natural History), London.

Vidal (1949) and Stichel (1961) illustrated and described *Aethus*

laticollis Wagner under the name of *Aethus pilosulus* Klug (vide Wagner 1954, pp. 2-3).

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24. *DATURA SUAVEOLENS* H.B. EX WILLD.
(SOLANACEAE)—FROM DISTRICT CHAMOLI IN
WESTERN HIMALAYAS

Datura suaveolens H.B. ex. Willd. Enum. Hort. Berol. 227.

An indigenous species of Mexico introduced in India as an ornamental plant. Raizada (1931) recorded it, growing in shady places in perfectly naturalized conditions, from Dehradun of upper Gangetic plain. In 1936 Raizada further gave its account.

During a floristic field study of Karanprayag block in Chamoli district I collected this species, from village Jakh, Tallachandpur, near Manda Khali on 24.vi.72. *Nautiyal* 5502, 145 m; wild in dry exposed habitat.

The taxon is distinguished by its shrubby habit and large, pendulous, white, sweet scented, flowers.

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